

Work Order ID 53915

November 23, 2009 2:45:48 PM



Page 1

Item ID: D3488-041

Revision ID: B

Item Name: Blade Fitting Assembly, LH

Start Date: 23/11/2009 Start Qty: 20.00

Required Date: 02/12/2009 Req'd Qty: 20.00

Reference:

Accept



Setup Start

Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date: 09/11/23

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3488

Rev B

100



Doosan

Doosan Lathe

DOOSAN LATHE

0.00

Memo

0.00

1-Turn as per Dwg DSK 101 & Folio FA625 2-Deburr

SL 10/01/14

20

110



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

SL 10/01/14

120



HAAS 1

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

0.00

Memo

0.00

1-Machine as per Folio FA625 & Dwg D3488 2-Deburr

10.10.15

M.A. 10/01/16

20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

0.00

10-01-15

20

0

140



QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

10-01-17

20

0

150



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

0.00

0.00

10-01-18

20

0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Required Date: 02/12/2009 Req'd Qty: 20.00

Reference:

Accept



Setup Start

Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

START TIME:

3:15pm

FINISH TIME:

OVEN TEMPERATURE:

320°F

0.00

747 10-01-18

(X20)

Ø

170



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

BR 10-01-19

(20)

180



HandFinish

Hand Finishing

HandFinishing

Memo

Install Inserts as per Dwg D3488

0.00

0.00

BR 10-3-16

(20)

✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D3488-041

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Start Date: 23/11/2009 Start Qty: 20.00

Required Date: 02/12/2009 Req'd Qty: 20.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Sudo 1/7

counted 720

Memo

0.00

200



Packaging

Packaging

Identify as per dwg & Stock Location:

FP-8

0.00

R 10-3-16

20

Memo

0.00

210



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/03/17

mf

10-3-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 23, 2009 2:45:59 PM

Page 1

Work Order ID: 53915

Parent Item: D3488-041RevB

Parent Item Name: Blade Fitting Assembly, LH



Comments:

Start Date: 23/11/2009

Required Date: 02/12/2009

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
ALS7-1032-225		Purchased	No				Each	877.0000	80.0000			
<div style="display: flex; justify-content: space-between;">   </div>												
INSERT												

* ALS4-1032-225

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	10768	
	100895	21	
	100896	102	
	102018	102	
	110118	52	
	111529	300	
	111581	300	

80. BR 10-3-16

D6103-003RevB

Manufactured No



Round Billet, Aluminum

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	MAT	9	
	33275	20	
	36236	40	
	42281	40	
	50371	20	
	54271		

20 SL 10/08/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	53915
Description: Blade Fitting, LH / Turning Detail for D3488-1/-2		Part Number:	D3488-1
Inspection Dwg: D3488 / DSK101 Rev: B / D		Page 1 of 2	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
Ø2.150	+/-0.005	2.150	✓			
Ø2.780	+/-0.005	2.780	✓			
Ø3.125	+/-0.010	3.124	✓			
Ø3.346	+/-0.010	3.347	✓			
0.125 x 45°	+/-0.010 x +/-0.1°	.125x45°	✓			
8.000	+0.030/-0.000	8.016	✓			
9.250	+/-0.010	9.250	✓			
0.188	+/-0.010	.188	✓			
R0.032	+/-0.010	.032	✓			
R0.062	+/-0.010	.062	✓			
Ø0.297	+0.005/-0.001	.302	✓			
Ø0.430	+/-0.010	.431	✓			
0.100	+/-0.010	.100	✓			
0.125	+/-0.010	.128	✓			
2.620	+/-0.010	2.620	✓			
3.500	+/-0.010	3.499	✓			
1.005	+/-0.010	1.004	✓			
Ø0.484	+0.005/-0.001	.485	✓			
1.180	+/-0.010	1.179	✓			
3.150	+/-0.010	3.149	✓			
3.070	+/-0.010	3.068	✓			
R0.063	+/-0.010	.063	✓			

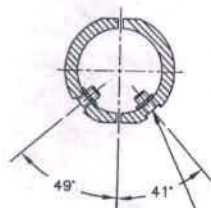
DART AEROSPACE LTD		Work Order:	53915
Description: Blade Fitting, LH / Turning Detail for D3488-1/-2		Part Number:	D3488-1
Inspection Dwg: D3488 / DSK101 Rev: B / D		Page 2 of 2	

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Milling Section						
Ø0.508	+0.006/-0.001	.508				
0.750	+/-0.010	.750				
1.500	+/-0.010	1.500				
11.18	+/-0.030	11.183				
R0.062	+/-0.010	R.062				
0.125	+/-0.010	.127				
0.590	+/-0.010	.591				
0.793	+/-0.010	.793				
1.351	+/-0.010	1.345				
1.317	+/-0.010	1.321				
1.802	+/-0.010	1.808				

Measured by: SL	Audited by: JML	Prototype Approval:	N/A
Date: 10/01/15	Date: 10/01/17	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.03.31	New Issue	KJ/JLM	
B	08.09.19	Reformat P/O D3488-041	KJ/JLM	
C	08.12.02	Dimension 8.000 removed	KJ/JLM	

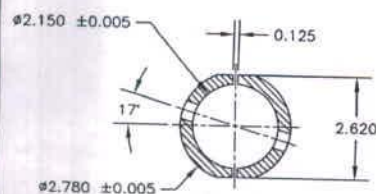
9
10
11
12



SECTION B-B

0.297
C'BORE 0.430 x 0.100
INSTALL ALS4-1032-225 (OR AKS4-1032-225
OR ALS7-1032-225 OR AKS7-1032-225)
INSERTS AFTER FINISH
(4 PLACES)

4



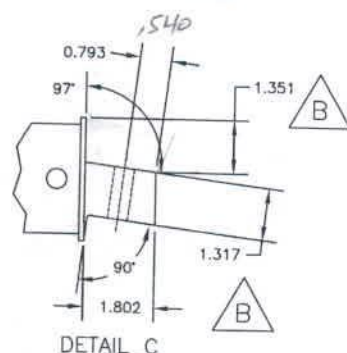
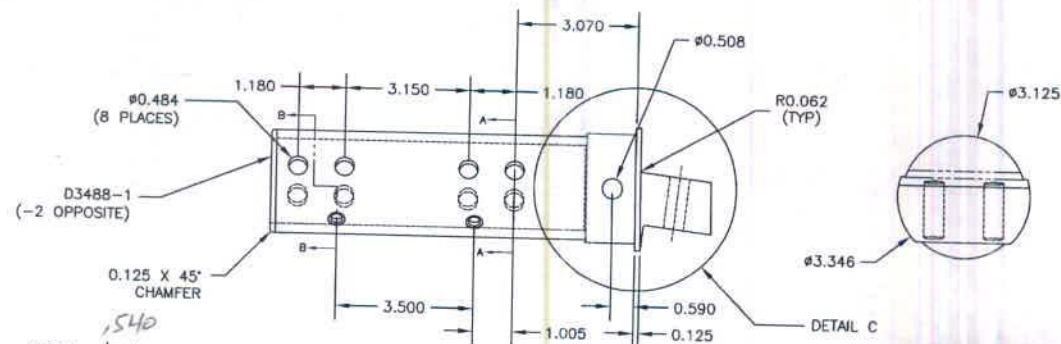
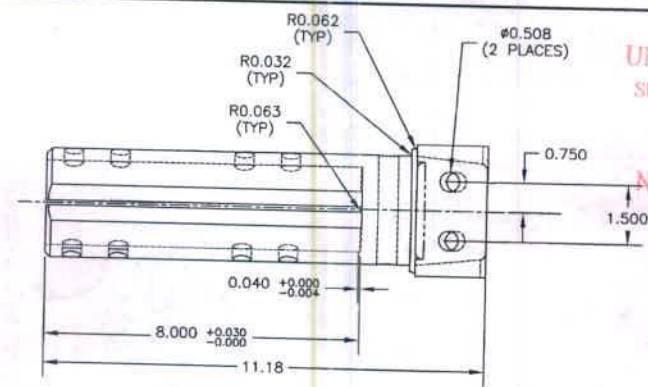
SECTION A-A

D3488-041/-042 BLADE FITTING ASSEMBLY PARTS LIST

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-042		
X		D3488-041	BLADE FITTING ASSEMBLY (LH)
	X	D3488-042	BLADE FITTING ASSEMBLY (RH)
1		D3488-1	BLADE FITTING (LH)
	1	D3488-2	BLADE FITTING (RH)
4	4	ALS4-1032-225 or AKS4-1032-225 or ALS7-1032-225 or AKS7-1032-225	INSERT

D3488-041/-042 BLADE FITTING

- MATERIAL: MAKE D3488-1/-2 FROM ALUMINUM 7075-T7351 ROUND BAR PER QQ-A-225/9 (REF. DART MATERIAL SPEC M7075T73R)
- FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- BREAK UNMARKED SHARP EDGES 0.010 TO 0.020
- INSTALL INSERTS AFTER POWDER COAT
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D3488-041 SHOWN (D3488-042 OPPOSITE)

RELEASED
06.03.15
PER DS
ECN #739

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B	06.03.15	CHANGE THICKNESS
A	05.12.20	NEW ISSUE
DESIGN	PH	DART AEROSPACE USA, INC.
DRAWN BY	PH	PORT HADLOCK, MA
CHECKED	A	DRAWING NO. D3488
APPROVED	A	REV. B
DATE	06.03.15	SHEET 1 OF 1
TITLE	BLADE FITTING	SCALE 1:3

